

REMARKS

In response to the restriction requirement dated June 25, 2007, applicants elect Group I, claims 1-6 and 21 for examination, with traverse on the grounds that Schliht et al., J. Virol., 65, p.6817-6825, 1991 ("Schliht") does not disclose the technical feature of the present claims.

Schliht, describes the following:

(1) In the case where the HBe gene is inserted after pre-C sequence, the monomer HBe protein having HBe antigenicity is secreted (Abstract, p.6820, the right column, lines 11 to 30);

(2) In the case where the HBe gene is inserted after the influenza HA sequence, the dimer HBe-like protein having HBe antigenicity and HBe antigenicity is secreted (Abstract, p.6820, the right column, line 11, to p. 6821, the right column, line 25); and

(3) Under electro-microscopic observation, the HBe-like protein secreted by HA sequence forms core particles, and the HBe protein secreted by a Pre-C sequence does not form particles (Abstract, p.6821, the right column, line 26, to p. 6822, the left column, line 21).

That is, Schliht describes that in the case where the HBe gene is inserted after influenza HA sequence which is a foreign gene core, particles are formed, and that the HBe protein secreted by the Pre-C sequence of the HBV gene does not form particles.

On the other hand, according to the present invention, a novel molecule which forms a core particle was identified from HBe antigen-positive serum, and this molecule is the HBV pre-core protein containing all or part of a signal sequence (See specification, [0018] and [0019]). This means that a particle containing the pre-C sequence was formed from the HBV gene. This result is clearly different from the result of Schliht.

In addition, the present specification describes that serum of a patient infected with HBV contains HBV particles formed from the HBV pre-core protein of the present invention, at a high frequency, and therefore, the present invention is clinically useful. (See the specification, p4, [0048], Example 7, Example 8, Example 9)

Therefore, Schliht does not describe or suggest the technical feature of Group I, and therefore all Groups should be examined together.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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